



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,042	12/15/2003	Lester F. Ludwig	2152-3033	4753
22242	7590	07/30/2008	EXAMINER	
FITCH EVEN TABIN AND FLANNERY			WARREN, DAVID S	
120 SOUTH LA SALLE STREET				
SUITE 1600			ART UNIT	PAPER NUMBER
CHICAGO, IL 60603-3406			2837	
			MAIL DATE	DELIVERY MODE
			07/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/737,042	LUDWIG, LESTER F.	
	Examiner	Art Unit	
	DAVID S. WARREN	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 22 May 2008.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 22-44 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 22-34 and 38-44 is/are rejected.
 7) Claim(s) 35 and 36 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 13 December 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 22 - 33,37, and 39 - 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stratton (6538185) in view of Yamaha MFC10 MIDI Foot Controller (hereinafter, "MFC10"; the article citing the MFC10 is undated, for the Applicant's convenience, the Examiner has cited PGPub 2004/0060422 which establishes that the MPC10, discussed in paragraph [0057], existed prior to May 9, 2002). Regarding claims 22 and 42, Stratton discloses the use of a plurality of individual foot controller modules (col. 1, lines 46-49), a mounting frame comprising a plurality of predetermined mounting locations (i.e., both the "tiers" and elements 41 are "predetermined locations") structured to simultaneously secure the plurality of individual foot controller modules in a reconfigurable mounting arrangement (col. 1, lines 53-56, "semi-permanent" implies that the mountings can be reconfigured), wherein each foot controller module is positionable within various mounting locations of the predetermined mounting locations (see paragraph bridging cols. 3 and 4), and wherein each mounting location is structured to define a separate aperture sized to receive an associated individual foot controller

module (see paragraph bridging cols. 3 and 4). Stratton does not disclose the use of modules that generate non-audio control signals. Nor does Stratton disclose the use of a control interface to transmit outgoing MIDI control signals to an external device. Nor does Stratton disclose the use of outgoing MIDI control signals are generated in response to one or more of the non-audio control signals generated by the foot controller modules. MFC10 discloses a plurality of individual foot controller modules (the Examiner notes that the cited article does not contain a drawing or photo, a cursory search on the Internet will yield several photos), i.e., foot switches, that generate non-audio signals (the switches make, break, or change connections, e.g., "on" or "off" and are non-audio control signals), a control interface to transmit outgoing MIDI signals to an external system (paragraph titled "Function Mode"), wherein the outgoing MIDI is generated in response to the foot switch (i.e., the non-audio control signal). It would have been obvious to one of ordinary skill in the art to modify Stratton with the MPC10 disclosure to obtain a modular foot controller for transmitting MIDI control signals. The motivation for making this modification is that many MIDI instruments require both hands to play (thus, foot pedals are necessary) and allow many controllable features (e.g., program change, velocity, etc.). Therefore, the modular MIDI foot controller would allow a user to upgrade to more controllability by adding more modules. Regarding claim 23, Stratton discloses different locations having different sizes (col. 3, lines 5-18). Regarding claim 24, Stratton appears to show uniformly spaced mounting holes (un-numbered, fig. 1 – seen as small black dots on lower and upper portions of each panel). Regarding claims 25 and 26, the exact size of each panel is deemed to be an obvious

matter of engineering design choice (wouldn't the modules and MIDI operate regardless of dimension?). Regarding claim 27, Stratton discloses that the first and second tier may be combined to accommodate larger or smaller modules – this is deemed to be synonymous with hierarchical. Regarding claim 28, see the paragraph bridging cols. 3 and 4, i.e., where the tiers are sized to accommodate larger or smaller pedals.

Regarding claims 29 and 43, Stratton discloses the use of a distributed power supply (see Stratton's claim 5). Regarding claim 30, MPC10 discloses foot switches (see paragraph titled "Markings on the Foot Switches"). Regarding claim 31, Stratton discloses pedals. Regarding claim 32, Official Notice is taken that most foot pedals use plural adjustable parameters (e.g., overdrive, tone, volume, etc.). Regarding claims 33 and 44, Official Notice is taken that many pedals use tactile pads (e.g., volume pedals have a treadle that can be felt, also wah-wah pedals). Regarding claim 37, the use of an array is deemed to be synonymous with *plural* modules. Regarding claim 39, the pedals of Stratton, and the foot switches of MPC10 both respond to impacts from the foot. Regarding claim 40, Official Notice is taken that organ-style MIDI controllers are extremely well-known (e.g., the Roland PK-7 designed for the Roland VK-77, circa 1999). Regarding claim 41, MPC10 shows a MIDI out connection connected to the mounting frame (i.e., to accommodate a MIDI connector).

3. Claim 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Stratton in view of MPC10 (both discussed *supra*) and in further view of Blish(7,372,453). The teachings of Stratton and MPC10 have been discussed *supra*. Neither Stratton nor MPC10 disclose the use of a foot operated null/contact touchpad. Blish discloses the

use of a foot controlled touchpad (figs. 2-6). It would have been obvious to one of ordinary skill in the art to combine the teachings of Stratton, MPC10, and Blish to obtain a modular foot controller for transmitting MIDI. The motivation for making this combination would be to allow a user to make foot controlled (i.e., hands-free control) MIDI selections via a computer screen (e.g., by controlling a mouse cursor to select MIDI output levels).

4. Claim 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Stratton in view of MPC10 (both discussed *supra*) and in further view of Gillaspy (5,506,371). The teachings of Stratton and MPC10 have been discussed *supra*. Neither Stratton nor MPC10 disclose the use of a foot operated strum pad. Gillaspy discloses a foot operated strum pad (col. 4, lines 3-5). It would have been obvious to include a foot operated strum pad in the teachings of Stratton and MPC10. The motivation for making this combination would be to provide further hands-free control.

Allowable Subject Matter

5. Claims 35 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose foot controller modules having a top side for operating a tactile control pad and having pressure or impact sensors located on the bottom side.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The art cited on PTO form 892 is deemed to be relevant to Applicant's invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID S. WARREN whose telephone number is (571)272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David S. Warren/
Primary Examiner, Art Unit 2837